

Doing 1to1 Right: 6 Components for Success



Maine Center For Meaningful Engaged Learning

www.mcmel.org

Click “Doing 1to1 Right!”

Based on Maine's Experience

- All 7th & 8th Grade students and teachers (38,000)
- Finished first 4 years, into second
- Apple iBooks, software, networks, training
- Focus on Learning
- Heavy emphasis on professional development and human networks

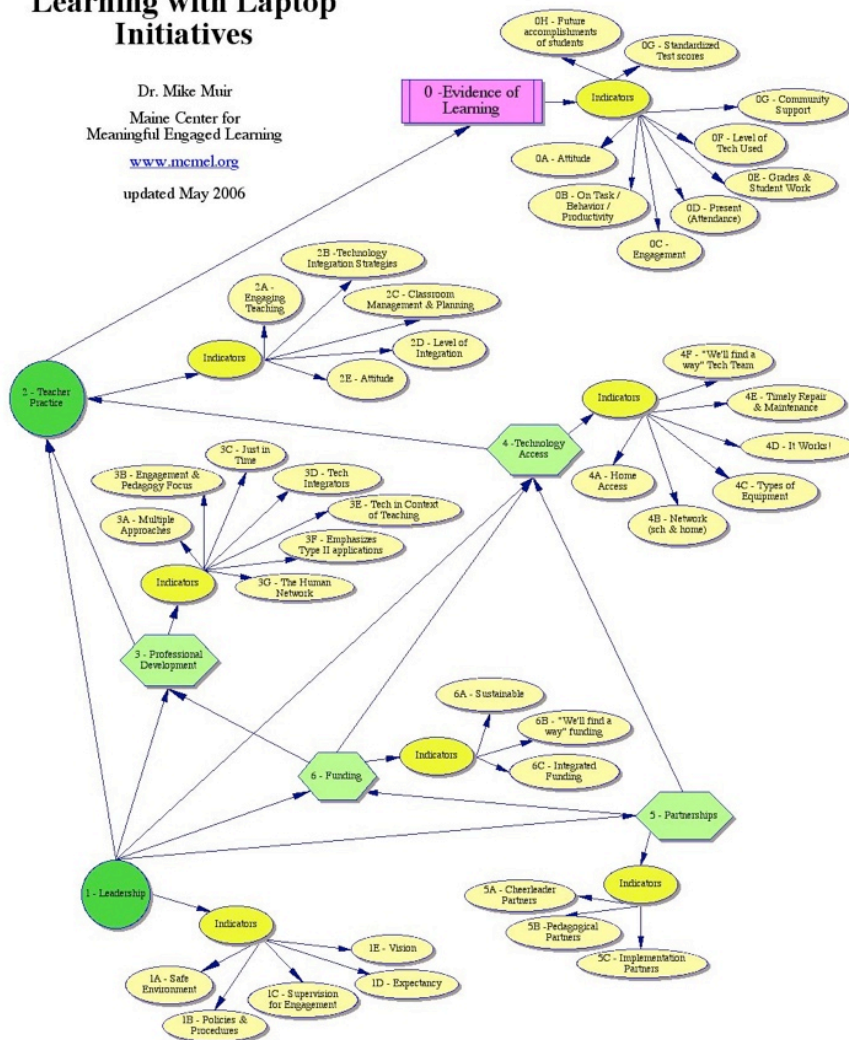
Derived from Contrasts

- Why was it working some places and not others?
- MLTI Strategies for Success
- Can see where strategies are used and where not

A Model for Success

A Model for Successful 1-to-1 Learning with Laptop Initiatives

Dr. Mike Muir
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Meaningful Engaged Learning
www.mcmel.org
updated May 2006

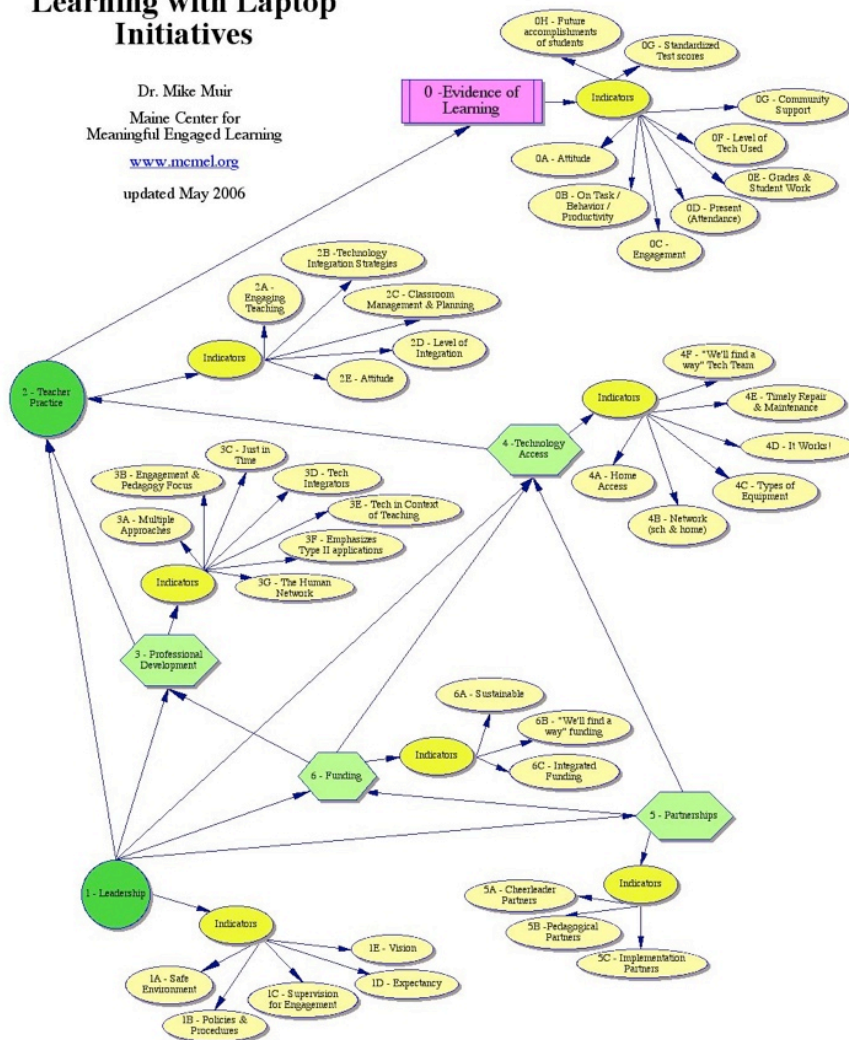


- Outcome Component
 - Learning
- 2 Critical Components
 - Teacher Practice
 - Leadership
- 4 Supporting but Necessary Components
 - Professional Development
 - Technology Access
 - Funding
 - Partnerships

Features of This Model

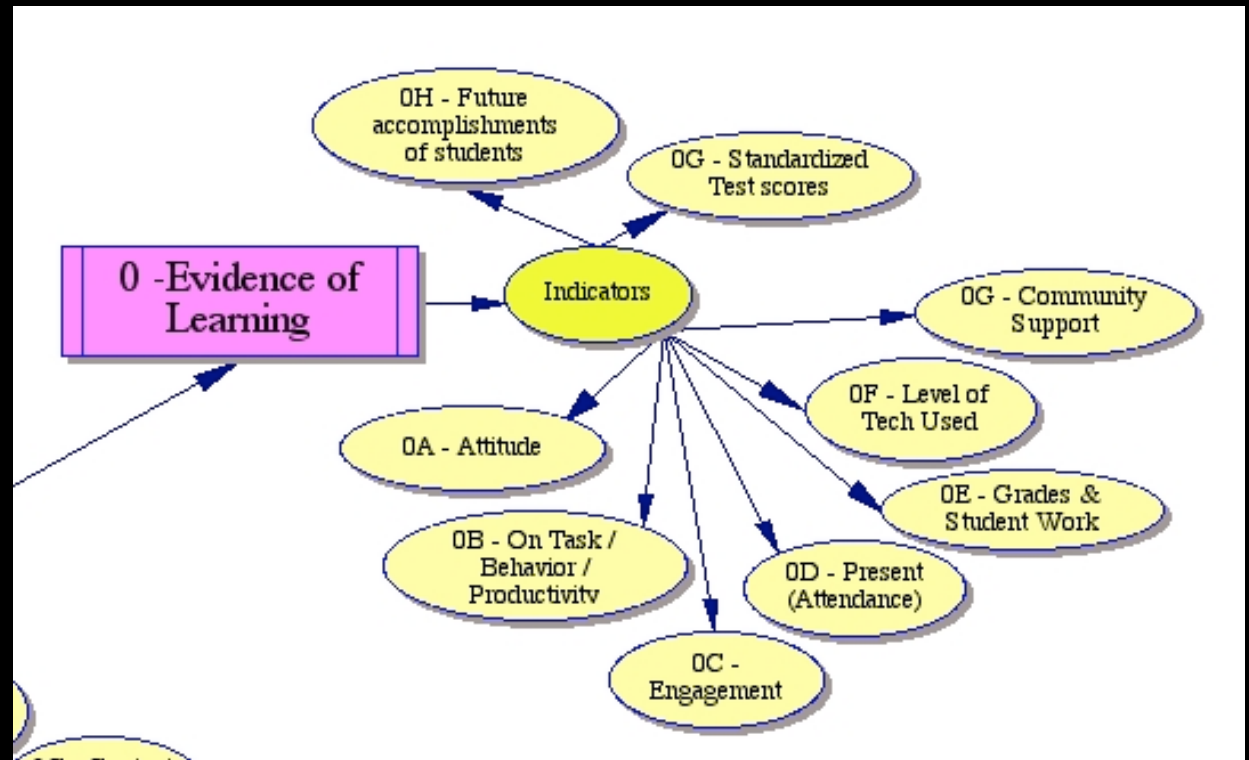
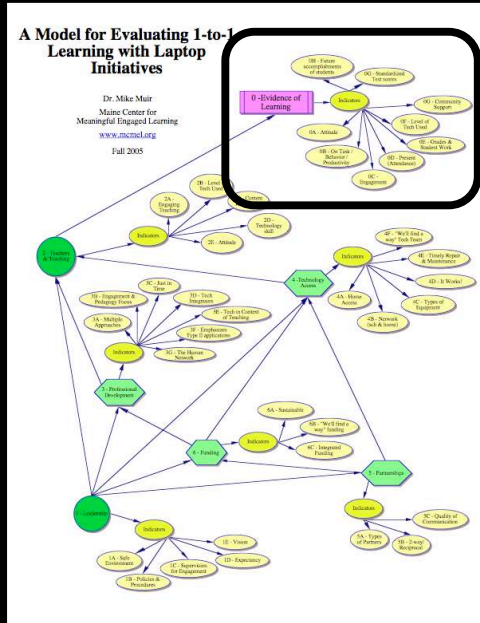
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- Makes clear that Learning is the desired outcome
- Recognizes that not all components are of equal importance
- Shows how the components interrelate

Outcome: Learning



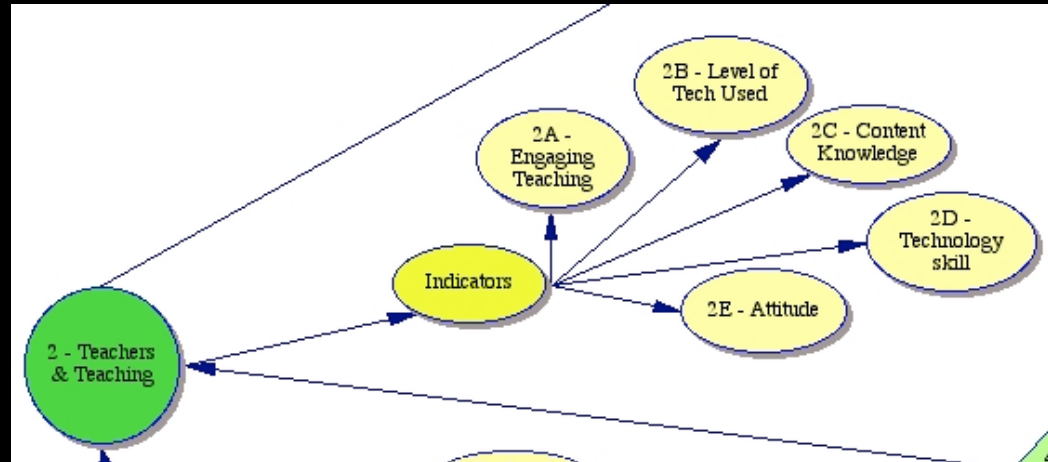
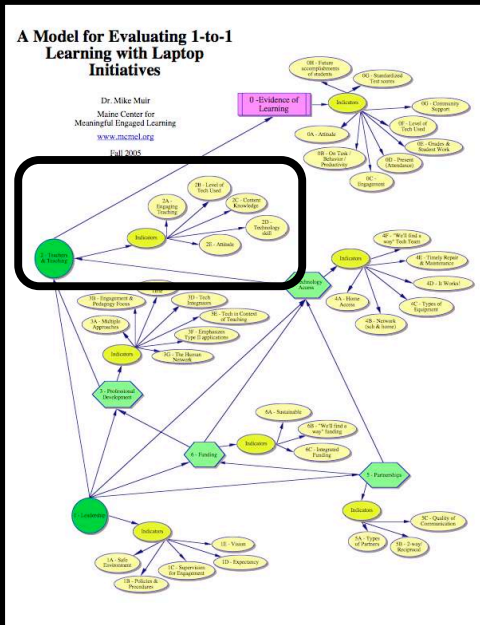
A Focus on Learning

- “One of the enduring difficulties about technology and education is that a lot of people think about the technology first and the education later” (Schacter, 1995, p. 11).
- “...The true value of technology for learning lies not in learning to use technology, but in using technology to learn.” (Educational Research Service, 2001)

This Isn't A Tech Buy



Teacher Practice



4 Ways Schools Use Computers

- Administrative Uses
- Teacher Uses
- Computer as Content Area
- Tool for Learning

Do Laptops Improve Learning?

- NO!
- Only Teachers Improve Learning...
- But laptops are a great tool for teachers

Engagement is the Key!

Tom March:

- The world around us is engaging students, so we run the risk of becoming trivial if we refuse to participate in trying to engaging students.
- These devices can be weapons of mass distraction and kids can tune out if we aren't engaging students.

3 Basic Criteria for Integrating Technology

- The activity is well connected to the curriculum
- The use of technology clearly enhances the lesson content
- The activity has students using higher order thinking skills

Don't be seduced by the
“Wow! Factor”

Level of Technology Use

- Type I & Type II
- Sustaining & Disruptive
- Automation & “Infomation”
- Type I: automating practices we did before the computer
- Type II: new possibilities only allowed or easily exploitable with technology

Type I Uses

- Drill & Practice software
- Online “texts”
- Content management systems
- Teacher PowerPoints
- Smart Boards

Type II Uses

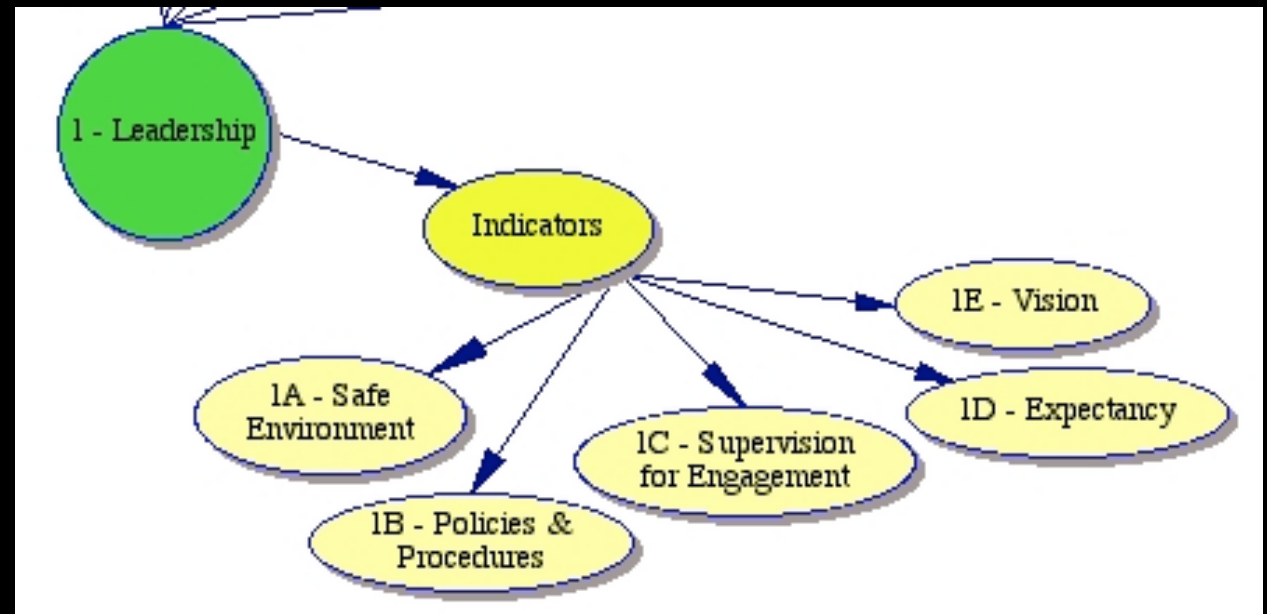
- eCommunication (Web 2.0 tools)
- Project-based Learning with Multimedia
- Inquiry & Information Access (research)
- Digital Storytelling
- WebQuests
- Digital Content & Tools

Learning Changes



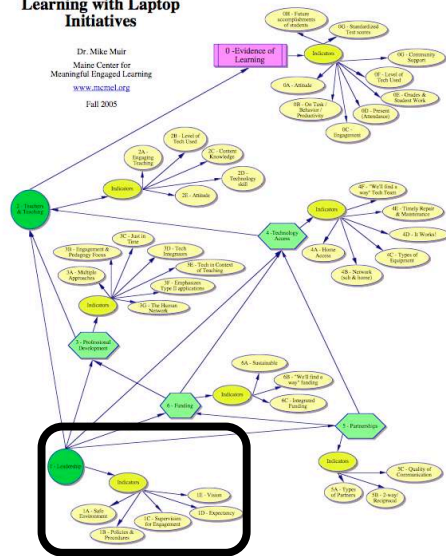
- Exploration
- Teacher as Learner
- Kids Teach Each Other
- Evolving Teacher's Role

Leadership



A Model for Evaluating 1-to-1 Learning with Laptop Initiatives

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www.muel.org
Fall 2005



Effective Leaders

- Set Direction
- Develop People
- Redesign the Organization

Davis, S., Darling-Hammond, L., LaPointe, M., & Meyerson, D. (2005). *School leadership study: Developing successful principals*. Stanford, CA: Stanford University, Stanford Educational Leadership Institute.

Building Leadership: Expectancy & Supervision

- Expect the use of technology
- Help feel safe - allow to start small
- Build it into teaching observations
 - Engagement
 - Technology use
 - Level of Blooms

Observer # _____

Campus/Room# _____ Grade Level _____ Classes/Area/Course _____

of Students _____ # via Laptop _____ Room Arrangement _____

Classroom Observation Checklist

A

Time Segments In Minutes	5	10	15	20	25	30	35	40	45	50	55	Notes
1. Class Organization – How are students working? (mark all that apply)												
<input type="checkbox"/> Individual students working alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Pairs of students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Small groups (3-5 students)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Whole class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Student presentations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Time Segments In Minutes	5	10	15	20	25	30	35	40	45	50	55	Notes
2. Teacher Role – What is the teacher's role?												
<input type="checkbox"/> Directing whole group (telling, lecturing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Mediating whole group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Modeling whole group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Facilitating / coaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Managing behavior or materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Administrative tasks (attendance, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Time Segments In Minutes	5	10	15	20	25	30	35	40	45	50	55	Notes
3. Student use of productivity tools (mark all that apply)												
<input type="checkbox"/> Word processing software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Presentation software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Spreadsheet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Database	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Authoring programs (SmartBuilder, video editing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Graphics programs (Illustrator, Photoshop)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Web authoring (FrontPage)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Spreadsheet (numeric, calculation, graphs, PDA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Time Segments In Minutes	5	10	15	20	25	30	35	40	45	50	55	Notes
4. Student use of subject specific learning tools (mark all that apply)												
<input type="checkbox"/> Simulation software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Drill and practice software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Problem Solving software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Factbook-related software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Learning assessment software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Hint - www.azed.org 1-1 Laptop Learning Classroom Observation Form 1/2011

Shared Leadership Teams

- Teacher Leader - Principal - Tech Lead
- Meet regionally twice a year
- 2 Day Summer Retreat
- 2 way communication between school & state

School Based Vision Work



- Think of a favorite student
- Where will they be 12 years from now?
- What do students need to do now to get ready for that?
- What do we need to do if students are doing that?

Procedures & Policies

- Acceptable Use Policy
- Posting of student work and pictures
- Handling inappropriate behavior (appropriately)
- Taking laptops home

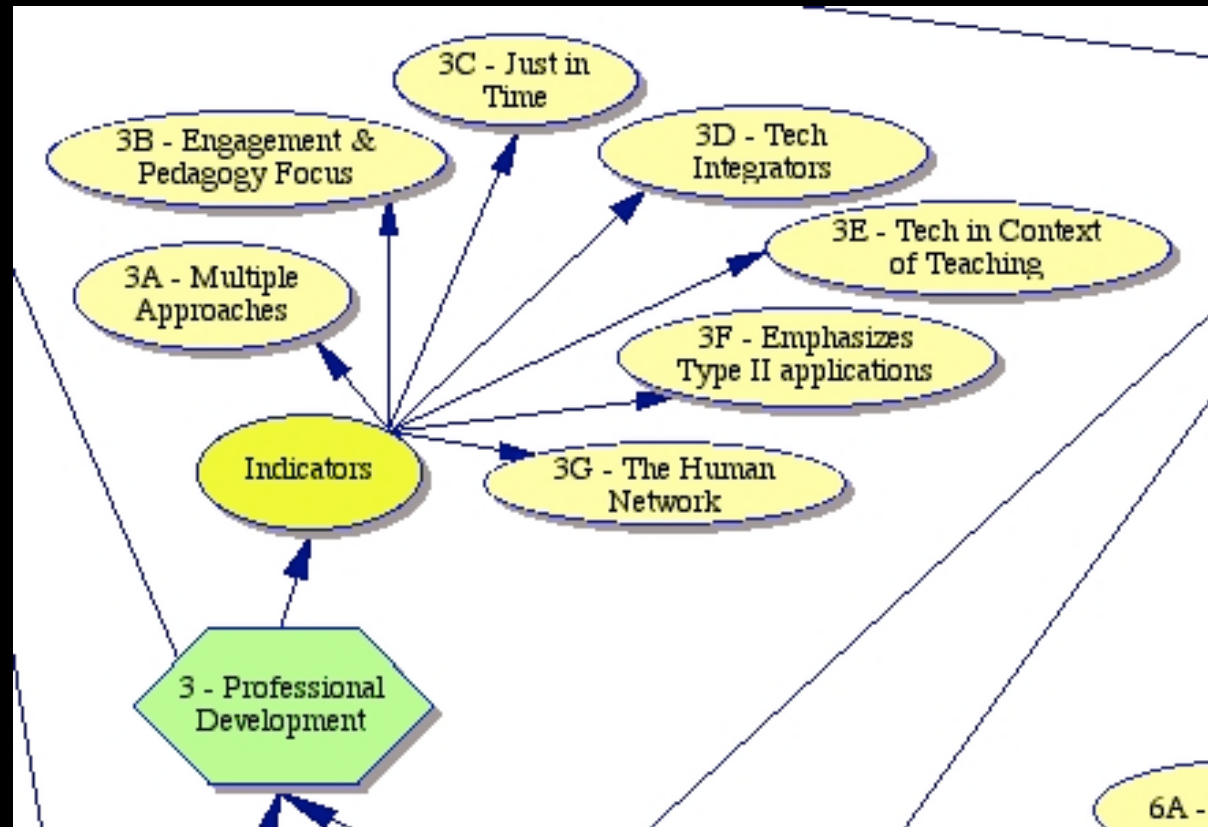
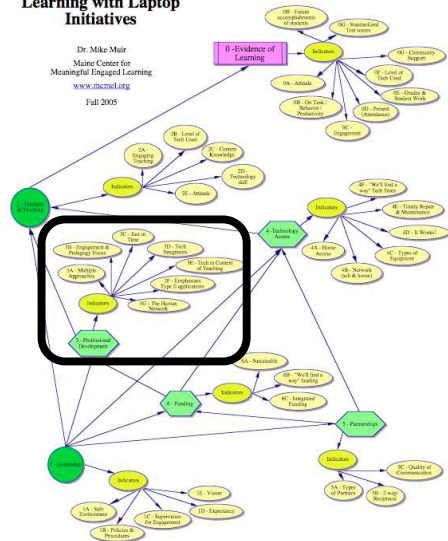
Send the Laptops Home

- More time to work on school work
- Benefit to whole family – GED & Adult Ed
- It's an Equity issue
- Find a way to solve the insurance problem
- But still a local context issue

Professional Development

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Multiple Approaches

- Initial 2-day training
- Exploration Sites
- Regional Meetings
- Workshops
- Conferences/Institutes
- In-House Workshops/Training
- In-House Support

PD in the Context of Teaching

- During the day - not on teachers' time
- Focus on teaching - not technology
- Pay attention to energy levels
- Respond to teachers' needs
 - Just in time, not just in case
 - Our PD changed based on teacher voices
 - Zone of Proximal Development (Vgotsky)
 - Content Meetings - agenda

A Couple of Powerful PD Ideas

- Get laptops into the hands of teachers as soon as you can
- Work with teachers to understand that kids are their biggest resource
- Provide opportunities for teachers to share, talk, and problem-solve
- Provide principals support on leadership strategies for 1to1

Technology Integrators

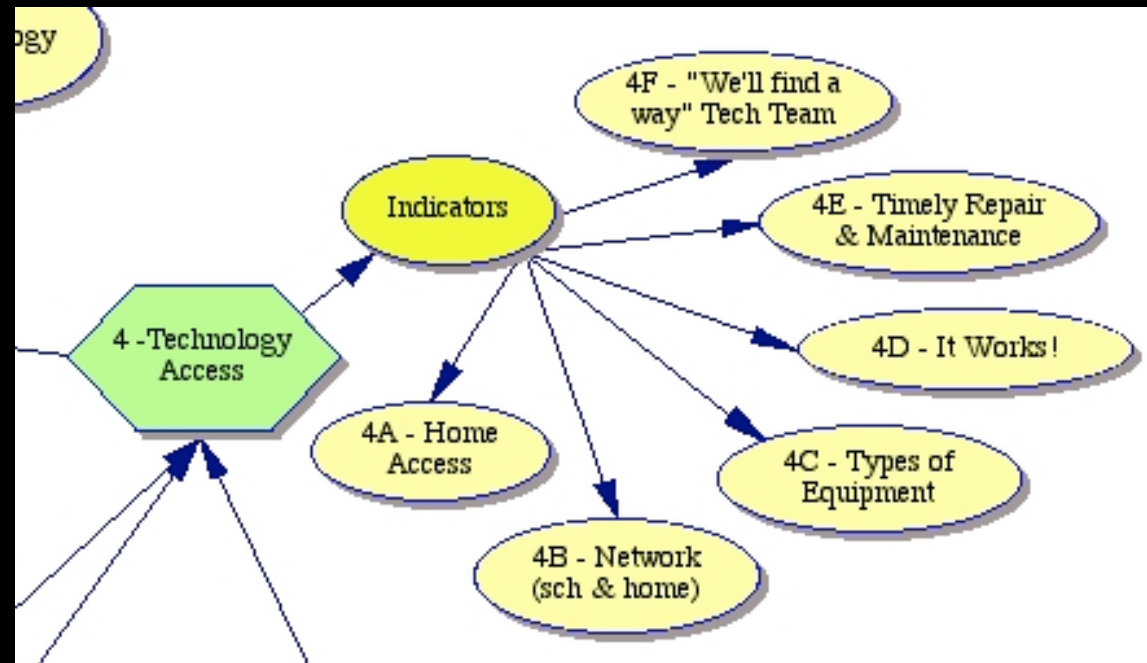
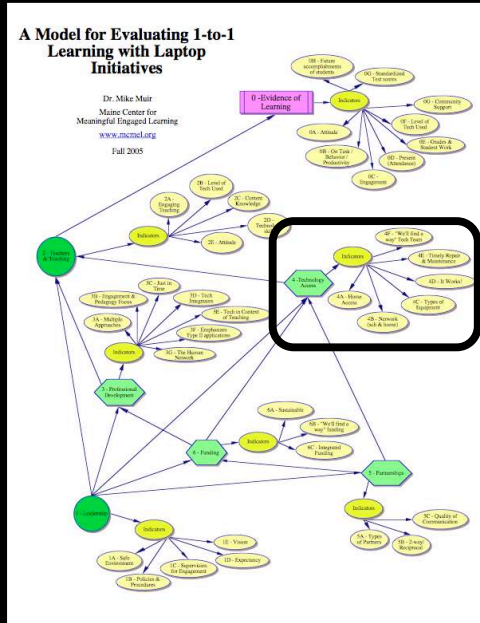
- Classroom Teachers with teaching with technology experience
- Job embedded support - support teachers during the school day
 - Team teach or model teaching
 - Co develop or review teacher developed materials
 - Support teachers trying new things

MaineLearns.org



- Interactive web site
- Resources for teachers
- Depends on teacher input
- Contribution is a critical piece

Technology Access & Support



Hardware, Software, Network

- RFP based on use, not tech
- Cart programs aren't 1to1
- Give it to everyone
- Rich software for projects & learning
- Make sure the network works for everyone

Avoid the Platform War

- It's a Religious War
- Easily Defended by any Perspective
 - PC - widest implementation base
 - Mac - no viruses, doesn't crash, easier maintenance
 - Linux - very low cost
- This is Largely an Adult Issue
- Discussion Needs to be Use & Support

Infrastructure

- Electrical
- Wireless and old buildings
- Storage - carts
- Charging & batteries
- Cases

Role of the Tech Lead

**Ensure that the System Works so that
Teachers Can Teach, and
Students Can Learn.**

“We’ll Find a Way” Tech Team

- Platform wars are alive and well...
- Locked down networks and computers
- Refusing to repair things not covered by warrantee
- “We can’t do that” attitude
- Arguing publicly against technology integration and 1-to-1

Jeff Mao's Hockey Analogy

- The Goalie
 - Keep everyone safe
 - Protect the “stuff”
- Leads Team in Goals
 - Visionary
 - “Follow me!”
- Leads Team in Assists
 - Provides Support
 - Creates Opportunities

Structure Should Liberate, Not Confine

- “Goalie” schools have had the most problems
 - Tech-Nazis, “No soup for you!”
- “Leads Team in Goals” schools are doing fine
 - Catalysts and change agents
- “Leads Team in Assists” schools have been the most successful
 - Empower Students & Teachers

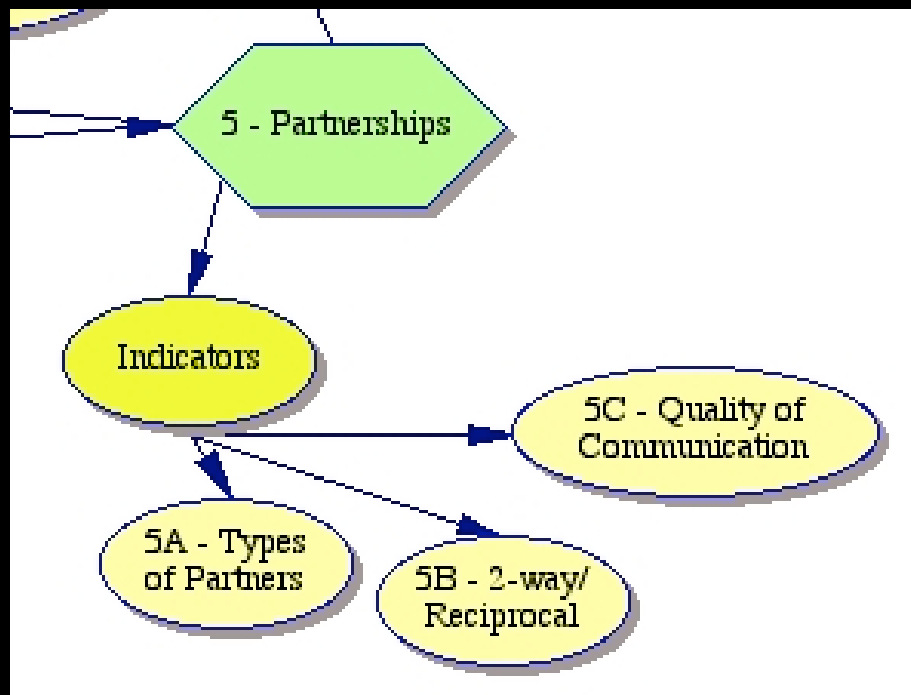
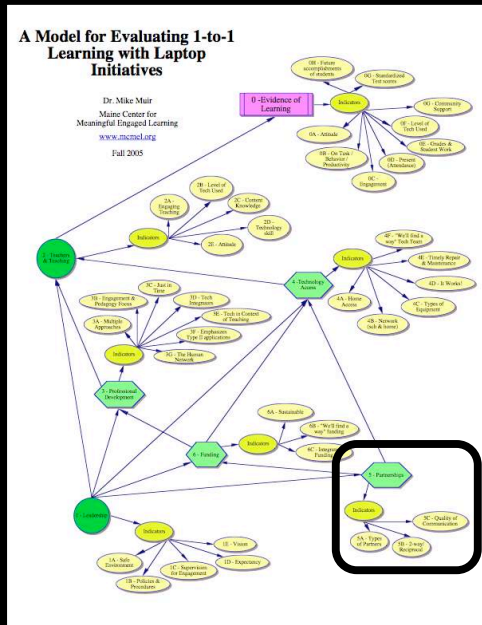
Keeping Everything Running

- Need an effective local reporting system
- Need a good Warrantee system or “local” repair team
- Quick turn-around time
- Keep Network working
- System for fixing non-covered repairs
- Student “iTeams”

Breakage

- Nothing to do with Technology
- Everything to do with School Culture
- Function of Teacher Use
- Function of Student Engagement
- Function of Leadership
- Function of Policies & Procedures

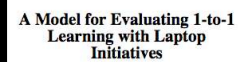
Partnerships



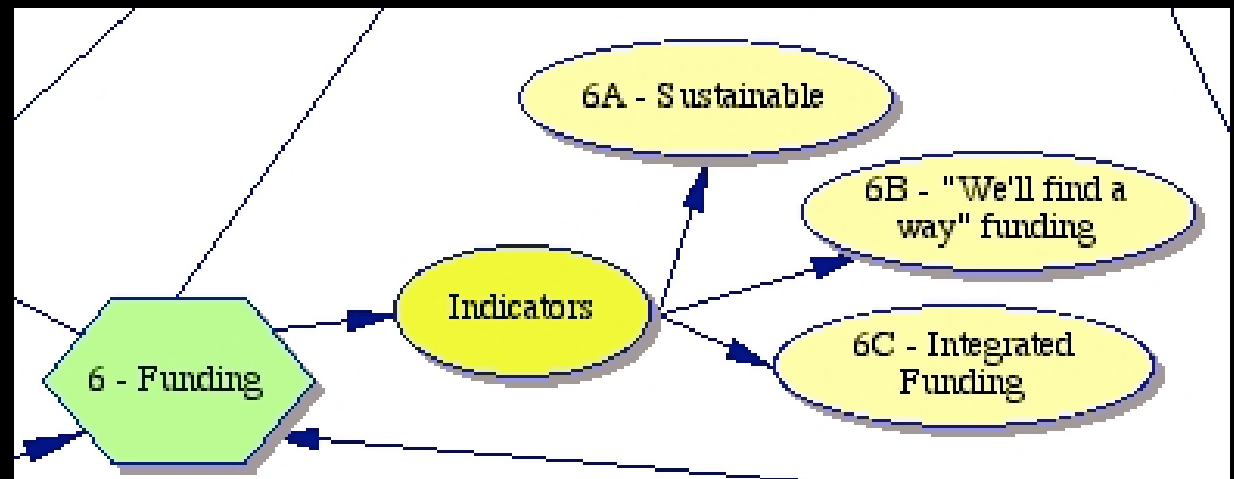
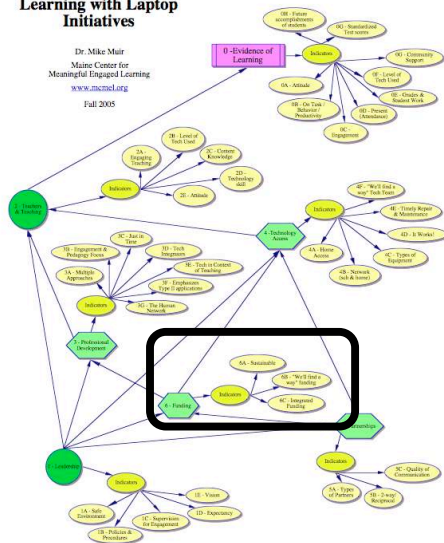
Types of Partners

- Cheerleader Partners
 - Chamber of Commerce
 - Community
- Implementation Partners
 - Vendor
 - Higher Ed
- Curricular Partners
 - Historical Societies, Organizations
 - Museums, Foundations

Funding



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Getting Started

- State Initiatives
- Bond Issues
- Grants
- Local Matching

Repurposing Money

- Beginning to Integrate Funding
- Repurposing textbook & material funds
- Repurpose computer lab teacher to technology integrator
- Repurpose SPED & Title funds

Integrated Funding

- Essential Programs & Services - EPS
- Network & Hardware - infrastructure
- Four year replacement cycle
- Tech Integrator - instruction/teacher
- Tech Coordinator - administrative
- Software - instructional materials

Lessons Learned

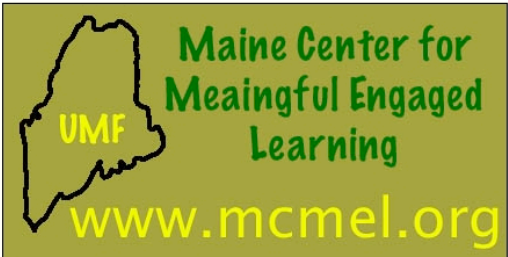
“If you think doing this is expensive,
you should try not doing it...”

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eReader.com Fictionwise RangerMuir Google TV Guide Blackboard eCampus PeopleSoft 8 Sign-in eBay Anthem Rewards








UMF
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Learning
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McMEL is dedicated to helping teachers find ways to motivate and engage every learner.

A project of the University of Maine at Farmington

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McMEL's Projects

<p><u>Workshops</u></p> <p>Downloadable and online materials from recent workshops conducted by McMEL's Director, Mike Muir</p>	<p><u>The Maine Learning with Laptop Studies</u></p> <p>Studying the impact of learning with laptop initiatives (including Maine's).</p> 	<p><u>The 1-to-1 Advocate</u></p> <p>Become a more effective Advocate for your 1-to-1 Learning with Laptop Initiative</p> <p>More and more schools are having to explain and justify their programs. How can schools be prepared to do this well?</p> <p>(A MLLS Project)</p>	<p><u>1-to-1 Learning with Laptop Evaluation for Success</u></p> <p>How do you move an educational technology initiative forward? Try looking over this evaluation model and the accompanying evaluation tools</p> <p>(A MLLS Project)</p>
<p><u>MaineLearns!</u></p> <p>Portal to information about the Maine Learning Technology Initiative providing middle schools enough laptops for every student and teacher</p> 	<p><u>Motivating Underachieving Students</u></p> <p>Learn about Motivating Underachieving Students</p> 	<p><u>Maine Association for Middle Level Education</u></p> <p>Maine's premier organization for teachers of 10-14 year olds</p> 	<p><u>Story of the Eight Year Study</u></p> <p>Online publishing of this seminal study of Progressive Education - What works in high schools?</p> 
<p>Director's Corner</p>	<p><u>Integrating Technology</u></p>	<p>Other Projects</p>	<p>Electronic Guild Network UMF's PT3 Project</p>

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